SOLID-STATE CT DETECTOR MODULES WITH IMPROVED SCINTILLATOR DIODE COUPLING

ABSTRACT OF THE DISCLOSURE

One aspect of the present invention is a finished detector module suitable for use in a computed tomography (CT) imaging system. The finished detector module includes a substrate; a photosensor array mounted on the substrate; an array of scintillators optically coupled to the photosensor array and separated therefrom by a gap filled with either air or a compliant clear film; and a flexible electrical cable electrically coupled to the photosensor array.

Among other advantages, the scintillator array and the photosensor array of the above-described finished detector module embodiment can be readily separated, thus allowing recovery of parts in scrap assemblies.